### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

App	licants:	
APP	ncants.	

Douglas BRYMAN

Application No.:

**NEW** 

Filed:

November 14, 2003

For:

HIGH RESOLUTION 3-D POSITION SENSITIVE DETECTOR FOR

**GAMMA RAYS** 

INFORMATION DISCLOSURE STATEMENT (SUBMISSION CONCURRENT WITH THE FILING OF A NEW PATENT APPLICATION)

## MAIL STOP PATENT APPLICATION

November 14, 2003

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

## I. <u>LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION</u>

The patents, publications, or other information submitted for consideration by the Office are listed on PTO-1449, attached hereto.

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Submitted herewith is a legible copy of (i) each U.S. and foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.
Because the present application was/is being filed after June 30, 2003, no copies of the U.S. patents or U.S. patent application publications which are listed on the attached Form 1449 are enclosed pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i) Any foreign patent documents or non-patent literature listed on the attached Form 1449 are enclosed herewith

Continuation of Application No. 10/192,614 Docket No. 98731-000125/US/COA

	the do	ocumen se they	tion is a continuation of U.S. Patent Application No. 10/192,614. All of ts listed on the copies of the PTO-1449s and PTO-892 are not enclosed were cited in U.S. Patent Application No. 10/192,614. If copies are se contact the undersigned.
Ш.			XPLANATION OF THE RELEVANCE st one box)
	a.		DOCUMENTS IN THE ENGLISH LANGUAGE
			The attached patents, publications, or other information in the English language do not require a statement of relevancy.
	b.		DOCUMENTS NOT IN THE ENGLISH LANGUAGE
			A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:
	c.		OTHER

#### <u>FEES</u>

This Information Disclosure Statement is being filed concurrently with the filing of a new patent application; therefore, no fee is required.

If The Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule and charge the appropriate fee to Deposit Account No. 08-0750.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any

## Continuation of Application No. 10/192,614 Docket No. 98731-000125/US/COA

additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY & PIERCE, P.L.C

ι.	Ву:	Donald J. Daley, Reg. No. 34,313
DJD/bof		P.O. Box 8910 Reston, Virginia 20195 (703) 668-8000
Enclosures:	Form PTO-1449(s) Documents	



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	K. Masuda et al, "A LIQUII ANNIHILATION EXPERIMENTS," North-Holland Publishing (	' Nuclear Instru Company	ments and Methods I	88 (196.	ı, pgs.	027 030	, ,
	K. Masuda et al., "TEST OI XENON," Nuclear Instrument Publishing Company	ts and Methods I	74 (1980) pgs. 439-	446, NO.			
	E. Aprile et al., "The Lic Energy Astrophysics," Proc Engineering, vol. 2806, po	ceedings-SPIE In	-Ray Imaging Telesc e International Soc	ope (LX) iety fo	eGRIT) f r Optica	or Medi	um
	M. Lopes et al., "POSITRON DETECTOR BASED ON LIQUID Of of Coimbra, Portugal, pgs	N EMISSION TOMOG KENON, " LIP-Coim	RAPHY INSTRUMENTATI bra, Department of	ON: DEV Physics	ELOPMENT of the	OF A Univers	ity
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	Hirata et al., "EXPERIMENTAL B (4-28-1988), vol. 205, no	STUDY OF THE A	ATMOSPHERIC NEUTRING -420	FLUX,	" Physic	cs Let	ters
<del></del>	Barkov et al., "Search for to Paul Scherrer Institut, I	May 1999, pgs. :	1-61.				
	A. Aguilar et al., (LSND Coobservation of," Phys. Rev	llaboration) "E . D, vol. 64(11	vidence for neutrino ): 112007 (2001).	oscil	lations	from	the
********	BRYMAN et al., "GATED GRID S Instruments and Methods in	SYSTEM USED WITH Phys. Res. A234	H A TIME PROJECTION (1985) pgs. 42-46	CHAMBE	R," Nuc	lear	
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l l	C. Hargrove, "THE SPATIAL RE Nuclear Instruments and Meth	SOLUTION OF Tools 219 (1984	THE TIME PROJECTION 4) 461.	CHAMBER	AT TRIO	MF,		
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		US 6,521,894 B1	02/18/2003	IWANCZYK et al.		
	<del>                                     </del>	US 6,459,085 B1	10/01/2002	CHANG et al.		
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		US 4,880,983 A	11/14/1989	MARKEY		
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APPLICANT

Douglas BRYMAN

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U.S. PATENT DOCUMENTS						
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		US 6,521,894 B1	02/2003	Iwanczyk et al.		
		US 6,486,468 B1	11/2002	Lacy, Jeffrey L.		
		US 6,459,085 B1	10/2002	Chang et al.		
		US 6,124,585 A	09/2000	Engdahl et al.		
		US 5,665,971 A	09/1997	Chen et al.		

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U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
		US 4,880,983 A	11/1989	Markey, John K.		
		US 4,262,202 A	04/1981	Cusano et al.		
		US 3,898,465 A	08/1975	Zaklad et al.		
		US-2002/0074505 A1	06/2002	Francke et al.		

FOREIGN PATENT DOCUMENTS							
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